AMENDMENTS TO CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A voltage detector, comprising:

a resistor pair connected to an input voltage;

a reference resistor connected to one resistor of the resistor pair, for partitioning the input voltage to produce a ~~first~~ comparison voltage;

at least one transistor pair respectively connected to the other resistor of the resistor pair and the reference resistor, for producing a ~~second comparison~~ reference detection voltage; and

a comparator connected ~~between~~ to a connection of the ~~two pairs~~ at least one transistor pair and the other resistor of the resistor pair, and a connection of the resistor pair and the reference resistor, for receiving and then comparing the ~~first~~ comparison voltage and the ~~second comparison~~ reference detection voltage, thereby outputting a voltage level,

wherein ~~the comparator has a detection voltage level, and the at least one transistor pair has a cascoded number varying with the detection voltage level such that a total number of cascoded transistor pairs is based on the cascoded number~~ V_{BG} is the reference detection voltage and M is a positive integer greater than 0, and the at least one transistor pair includes M cascoded transistor pairs, and

wherein a resistance ratio of the resistor pair, a resistance of the reference resistor and an area ratio of the at least one transistor pair are adjusted to reduce temperature coefficient impact.

2. (Canceled)

3. (Currently Amended) The voltage detector as claimed in claim 2, wherein the comparator ~~has~~ at least once detects the input voltage to be a detection voltage level ~~as~~ of $V_{BG}\frac{R2+R3}{R3}$, where ~~V_{BG} is the second comparison voltage,~~ R2 is a resistance of the one of the resistor pair and R3 is the reference resistor.

4. (Canceled)

5. (Canceled)

6. (Canceled)

7.(Previously Presented) The voltage detector as claimed in claim 1, further comprising: a power disconnection switch coupled between the resistor pair and the input voltage, for disconnecting a current flow in the resistor pair and thus entering a standby mode.